

**Practice: 441 - Irrigation System, Microirrigation****Scenario: #2 - Specialty Crop Microirrigation System****Scenario Description:**

An irrigation system for vegetables or other specialty crops typically of small acreage (2 acre). Water delivery to the plants by surface lines and/or subsurface applicators. Spacing of the plants will vary, w/ delivery lines spaced 60". Area in question is being converted from other means of less efficient irrigation. Payment includes on-ground mainline and drip tape, fittings, and apurtenances. Pump & supply line is not included in this payment and may be offered through associated practices 533 Pumping plant and 430 Irrigation Pipeline, or existing pump & supply lines will be used. Cost represents typical situations for conventional, organic, and transitioning to organic producers.

Resource Concerns: Insufficient Water - Inefficient use of irrigation water, Degraded Plant Condition - Undesirable plant productivity and health, Water Quality Degradation - Excessive sediment in surface waters, and Inefficient Energy Use - Equipment and facilities.

Associated Practices: 533-Pumping Plant, 449- Irrigation Water Management, 430 - Irrigation Pipeline, 434 - Soil Moisture Measurement

**Before Situation:**

A production field has an inefficient surface flood irrigation system causing irrigation water loss that impacts water quality and water quantity.

**After Situation:**

A surface placed microirrigation system is utilized to provide highly efficient irrigation to an field. Water applications are reduced and runoff eliminated. Offsite water quality is improved, and on site water use is reduced.

**Scenario Feature Measure:** Acres in System

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Scenario Cost:** \$16,472.76

**Scenario Cost/Unit:** \$8,236.38

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Materials</b>						
Micro Irrigation, surface drip tubing or tape	1488	Tubing or Tape is installed above ground for surface drip irrigation, includes installation, and connections to the supply and flushing laterals. Tubing has emitters built in.	Foot	\$0.87	18296	\$15,917.52
Micro Irrigation, screen filter, < 100 gpm	1617	Screen filter for Micro Irrigation used in small systems. Includes filter. No controls are included or needed.	Each	\$277.62	2	\$555.24

**Practice: 441 - Irrigation System, Microirrigation****Scenario: #4 - Seasonal High Tunnel Micro Irrigation System****Scenario Description:**

An irrigation system for vegetables or other specialty crops, irrigating inside of a high-tunnel poly-house typically 2,178 sq ft in size. Water delivery to the plants by surface lines and/or subsurface applicators. Spacing of the plants will vary, w/ delivery lines spaced 60". Area in question is being converted from other means of less efficient irrigation. Payment includes on-ground mainline and drip tape, fittings, and apurtenances. Pump & supply line is not included in this payment and may be offered through associated practices 533 Pumping plant and 430 Irrigation Pipeline, or existing pump & supply lines will be used. Cost represents typical situations for conventional, organic, and transitioning to organic producers.

Resource Concerns: Insufficient Water - Inefficient use of irrigation water, Degraded Plant Condition - Undesirable plant productivity and health, Water Quality Degradation - Excessive sediment in surface waters, and Inefficient Energy Use - Equipment and facilities.

Associated Practices: 533-Pumping Plant, 449- Irrigation Water Management, 430 - Irrigation Pipeline, 434 - Soil Moisture Measurement

**Before Situation:**

A high tunnel has an inefficient overhead sprinkler irrigation system causing irrigation water loss that impacts water quality and water quantity.

**After Situation:**

A microirrigation system is utilized to provide highly efficient irrigation to crops grown in a high tunnel. Water applications are reduced and runoff eliminated. Offsite water quality is improved, and on site water use is reduced.

**Scenario Feature Measure:** Each High Tunnel

**Scenario Unit:** Each

**Scenario Typical Size:** 1

**Scenario Cost:** \$676.08

**Scenario Cost/Unit:** \$676.08

**Cost Details (by category):**

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
<b>Materials</b>						
Micro Irrigation, surface drip tubing or tape	1488	Tubing or Tape is installed above ground for surface drip irrigation, includes installation, and connections to the supply and flushing laterals. Tubing has emitters built in.	Foot	\$0.87	458	\$398.46
Micro Irrigation, screen filter, < 100 gpm	1617	Screen filter for Micro Irrigation used in small systems. Includes filter. No controls are included or needed.	Each	\$277.62	1	\$277.62